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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
09/521,730	03/09/2000	Kotikalapudi Sriram	K Siriam 15-9	3757	
220.0	7590 04/05/2007 IINISTRATOR	1	EXAMINER		
	HNOLOGIES INC.		NGUYEN	, TOAN D	
ROOM 2F-190 600 MOUNTA	IN AVENUE		ART UNIT	PAPER NUMBER	
************	L, NJ 07974-0636		2616		
SHORTENED STATUTOR	Y PERIOD OF RESPONSE	MAIL DATE	DELIVER	Y MODE	
3 MOI	<u> </u>	04/05/2007	PAPER		

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

			51
	Application No.	Applicant(s)	
	09/521,730	SRIRAM ET AL.	
Office Action Summary	Examiner	Art Unit	
	Toan D. Nguyen	2616	
The MAILING DATE of this communication	n appears on the cover sheet w	vith the correspondence address	
Period for Reply			
A SHORTENED STATUTORY PERIOD FOR RI WHICHEVER IS LONGER, FROM THE MAILIN  - Extensions of time may be available under the provisions of 37 Cf after SIX (6) MONTHS from the mailing date of this communicatio  - If NO period for reply is specified above, the maximum statutory p  - Failure to reply within the set or extended period for reply will, by s Any reply received by the Office later than three months after the earned patent term adjustment. See 37 CFR 1.704(b).	G DATE OF THIS COMMUN FR 1.136(a). In no event, however, may a n. eriod will apply and will expire SIX (6) MO statute, cause the application to become A	ICATION. I reply be timely filed INTHS from the mailing date of this community ABANDONED (35 U.S.C. § 133).	
Status			
1) Responsive to communication(s) filed on 2	27 December 2006		
	This action is non-final.		
3) Since this application is in condition for all		tters, prosecution as to the meri	its is
closed in accordance with the practice und	<u>*</u>	•	
Disposition of Claims			
4)⊠ Claim(s) <u>1-6,9-12,15-18 and 28-31</u> is/are <sub>l</sub>	pending in the application.		
4a) Of the above claim(s) is/are with	• • • • • • • • • • • • • • • • • • • •		
5) Claim(s) is/are allowed.	•		
6)⊠ Claim(s) <u>1-6,9-12,15-18 and 28-31</u> is/are i	rejected.		
7) Claim(s) is/are objected to.			
8) Claim(s) are subject to restriction a	nd/or election requirement.		
Application Papers			
9)☐ The specification is objected to by the Exa	miner.		
10)⊠ The drawing(s) filed on <u>09 March 2000</u> is/a	ire: a)⊠ accepted or b)⊡ ob	jected to by the Examiner.	
Applicant may not request that any objection to	the drawing(s) be held in abeya	nce. See 37 CFR 1.85(a).	
Replacement drawing sheet(s) including the co	prrection is required if the drawing	g(s) is objected to. See 37 CFR 1.1	21(d).
11) The oath or declaration is objected to by th	e Examiner. Note the attache	d Office Action or form PTO-15	2.
Priority under 35 U.S.C. § 119			
12) Acknowledgment is made of a claim for for	eign priority under 35 U.S.C.	§ 119(a)-(d) or (f).	
a) ☐ All b) ☐ Some * c) ☐ None of:			
1. Certified copies of the priority document	nents have been received.	·	
<ol><li>Certified copies of the priority document</li></ol>	nents have been received in A	Application No	
3. Copies of the certified copies of the	•	n received in this National Stage	<b>)</b>
application from the International Bu	· · · · · · · · · · · · · · · · · · ·		
* See the attached detailed Office action for a	a list of the certified copies no	t received.	
Attachment(s)			
1) Motice of References Cited (PTO-892)		Summary (PTO-413)	
2) Notice of Draftsperson's Patent Drawing Review (PTO-948	7	(s)/Mail Date Informal Patent Application (PTO-152)	
<ol> <li>Information Disclosure Statement(s) (PTO-1449 or PTO/SI Paper No(s)/Mail Date</li> </ol>	6) Other:		

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## **DETAILED ACTION**

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1. In view of the Pre-Brief Conference request filed on 12/27/06, PROSECUTION IS HEREBY REOPENED. A non-final office action is set forth below.

To avoid abandonment of the application, appellant must exercise one of the following two options:

- (1) file a reply under 37 CFR 1.111 (if this Office action is non-final) or a reply under 37 CFR 1.113 (if this Office action is final); or,
- (2) initiate a new appeal by filing a notice of appeal under 37 CFR 41.31 followed by an appeal brief under 37 CFR 41.37. The previously paid notice of appeal fee and appeal brief fee can be applied to the new appeal. If, however, the appeal fees set forth in 37 CFR 41.20 have been increased since they were previously paid, then appellant must pay the difference between the increased fees and the amount previously paid.

A Supervisory Patent Examiner (SPE) has approved of reopening prosecution by signing below:

## Claim Rejections - 35 USC § 103

- 2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 3. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein

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were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

4. Claims 1-3 and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Goto (US 4,939,772) in view of Key et al. (US 5,991,272) further in view of Duault et al. (US 5,912,894).

For claims 1-3, Goto discloses switching control apparatus for a communication terminal having a voice terminal device and a non-voice terminal device, comprising the steps of:

receiving an incoming call, the incoming call representing one of a plurality of call types comprising voice calls and non-voice calls that can use a facility (col. 2 lines 10-17);

admitting the incoming call for using the facility as a function of the call type of the incoming call (col. 10-17).

However, Goto do not expressly disclose:

determining an amount of bandwidth available for voice as a function of a number of non-voice admitted calls;

updating a count of a number of voice calls currently admitted, when the admitted incoming call is a voice call; and

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dynamically varying a block-dropping threshold parameter as a function of the available voice bandwidth.

In an analogous art, Key et al. disclose:

determining an amount of bandwidth available for voice as a function of a number of non-voice admitted calls (figure 7, col. 8 lines 29-67); and

updating a count of a number of voice calls currently admitted, when the admitted incoming call is a voice call (col. 13 lines 28-29).

One skilled in the art would have recognized the determining an amount of bandwidth available for voice as a function of a number of non-voice admitted calls, and would have applied Key et al.'s network's operation in Goto's switching control.

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention, to use Key et al.'s method and apparatus for controlling a communications network in Goto's switching control apparatus for a communication terminal having a voice terminal device and a non-voice terminal device with the motivation being to calculate effective bandwidths (col. 8 lines 34-35).

Furthermore, Goto in view of Key et al. do not expressly disclose dynamically varying a block-dropping threshold parameter as a function of the available voice bandwidth. In an analogous art, Duault et al. disclose dynamically varying a block-dropping threshold parameter as a function of the available voice bandwidth (col. 1 lines 9-10).

One skilled in the art would have recognized the dynamically varying a blockdropping threshold parameter as a function of the available voice bandwidth, and would

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have applied Duault et al.'s dynamically adjusting the communication bandwidth assigned to an audio channel in Goto's switching control. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention, to use Duault et al.'s method and system for monitoring traffic to optimize the bandwidth reserved to an audio channel connection in a high speed digital network in Goto's switching control apparatus for a communication terminal having a voice terminal device and a non-voice terminal device with the motivation being to track the activity of a voice assigned connection, i.e., a PBX or PABX entry to the network and dynamically adjust its assigned network communication bandwidth accordingly (col. 1 lines 12-14).

For claim 9, Goto discloses switching control apparatus for a communication terminal having a voice terminal device and a non-voice terminal device, comprising the steps of:

determining the call type of an incoming call, each call type having an associated bandwidth (col. 2 lines 10-17);

admitting the incoming call to use the virtual circuit (col. 10-17).

However, Goto do not expressly disclose:

determining an amount of bandwidth available for voice as a function of a number of non-voice admitted calls;

admitting the incoming call as a function of the call type of the incoming call; updating a count of a number of voice calls currently admitted, when the admitted incoming call is a voice call; and

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dynamically varying a block-dropping threshold parameter as a function of the available voice bandwidth.

In an analogous art, Key et al. disclose determining an amount of bandwidth available for voice as a function of a number of non-voice admitted calls;

admitting the incoming call as a function of the call type of the incoming call (figure 7, col. 8 lines 29-67); and

updating a count of a number of voice calls currently admitted, when the admitted incoming call is a voice call (col. 13 lines 28-29).

One skilled in the art would have recognized the determining an amount of bandwidth available for voice as a function of a number of non-voice admitted calls, and would have applied Key et al.'s network's operation in Goto's switching control.

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention, to use Key et al.'s method and apparatus for controlling a communications network in Goto's switching control apparatus for a communication terminal having a voice terminal device and a non-voice terminal device with the motivation being to calculate effective bandwidths (col. 8 lines 34-35).

Furthermore, Goto in view of Key et al. does not expressly disclose dynamically varying a block-dropping threshold parameter as a function of the available voice bandwidth. In an analogous art, Duault et al. disclose dynamically varying a block-dropping threshold parameter as a function of the available voice bandwidth (col. 1 lines 9-10).

One skilled in the art would have recognized the dynamically varying a block-dropping threshold parameter as a function of the available voice bandwidth, and would have applied Duault et al.'s dynamically adjusting the communication bandwidth assigned to an audio channel in Goto's switching control. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention, to use Duault et al.'s method and system for monitoring traffic to optimize the bandwidth reserved to an audio channel connection in a high speed digital network in Goto's switching control apparatus for a communication terminal having a voice terminal device and a non-voice terminal device with the motivation being to track the activity of a voice assigned connection, i.e., a PBX or PABX entry to the network and dynamically adjust its assigned network communication bandwidth accordingly (col. 1 lines 12-14).

5. Claims 4 and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Goto (US 4,939,772) in view of Key et al. (US 5,991,272) and Duault et al. (US 5,912,894) further in view of Miyagi et al. (US 5,894,471).

For claim 4, Goto in view of Key et al. and Duault et al. does not expressly disclose the step of blocking the incoming call if the incoming call is not admitted. In an analogous art, Miyagi et al. disclose the step of blocking the incoming call if the incoming call is not admitted (col. 13 lines 40-46).

One skilled in the art would have recognized the step of blocking the incoming call if the incoming call is not admitted, and would have applied Miyagi et al's connection admission control in Goto's switching control. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention, to use

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Miyagi et al's ATM network system and connection admission control method in Goto's switching control apparatus for a communication terminal having a voice terminal device and a non-voice terminal device with the motivation being to provide call blocking due to the lack of bandwidth (col. 13 lines 40-41).

For claim 10, the claim is directed to the same subject matter in claim 4.

Therefore, it is subjected to the same rejection.

6. Claims 5-6 and 11-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Goto (US 4,939,772) in view of Key et al. (US 5,991,272) and Duault et al. (US 5,912,894) further in view of Davis (US 6,157,654).

For claim 5, Goto in view of Key et al. and Duault et al. does not expressly disclose wherein step (b) further includes the step of reducing the spare bandwidth by an amount equal to the call bandwidth of the admitted incoming call. In an analogous art, Davis discloses the step of reducing the spare bandwidth by an amount equal to the call bandwidth of the admitted incoming call (col. 6 line 65 to col. 7 line 3).

Davis discloses further the step of increasing the spare bandwidth by an amount equal to the call bandwidth of the admitted incoming call when the admitted incoming call departs (col. 7 lines 6-9 as set forth in claim 6).

One skilled in the art would have recognized the step of reducing the spare bandwidth by an amount equal to the call bandwidth of the admitted incoming call, and would have applied Davis's WFG Control in Goto's switching control. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention, to use Davis adaptive service weight assignment for ATM scheduling in Goto's switching

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control apparatus for a communication terminal having a voice terminal device and a non-voice terminal device with the motivation being to provide WFQ Control to determine whether the demand can be met by the existing queue weights by comparing the request with the queue part allocated to the queue (col. 6 line 65 to col. 7 line 1).

For claim 11, the claim is directed to the same subject matter in claim 5. Therefore, it is subjected to the same rejection.

For claim 12, the claim is directed to the same subject matter in claim 6. Therefore, it is subjected to the same rejection.

## Allowable Subject Matter

7. Claims 15-18, and 28-31 are allowed.

Regarding claim 15, the prior art fails to teach a combination of the steps of:
responsive to the admitted call, providing a stream of ATM Adaptation Layer 2

(AAL2) packets for conveying information associated with the admitted call; and
responsive to the stream of AAL2 packets, providing a respective stream of ATM
cells for transmission over the virtual circuit, in the specific combination as recited in the claim.

Regarding claim 28, the prior art fails to teach a combination of the steps of:
a processor responsive to the admitted call for providing a stream of ATM

Adaptation Layer 2 (AAL2) packets for conveying information associated with the admitted call; and

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a processor responsive to the stream of AAL2 packets for providing a respective stream of ATM cells for transmission over the virtual circuit, in the specific combination as recited in the claim.

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8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Toan D. Nguyen whose telephone number is 571-272-3153. The examiner can normally be reached on M-F (7:00AM-4:30PM).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mr. Huy Vu can be reached on 571-272-3155. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

TN TN

HUY D. VU

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